UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/657,068	09/07/2000	Kenneth M. Buckland	062891.0362	1585

7590 06/16/2005

Baker Botts LLP
2001 Ross Avenue
Dallas, TX 75201-2980

EXAMINER	
WILSON, ROBERT W	
ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/657,068	BUCKLAND, KENNETH M.	
	Examiner	Art Unit	
	Robert W. Wilson	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 October 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-7,9-16,18-33,35-38 and 40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-7,9-16,18-33,35-38 and 40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

PHIRIN SAM
PRIMARY EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.0 The proposed after final amendment was not entered. Based upon further consideration as well as an additional search the examiner withdraws the finality of the previous action withdrawn. A revised rejection has been written based upon the 10/12/04 amendment. Based upon the additional search the examiner discovered prior art; consequently, this rejection has been submitted in order to give the applicant a chance to respond.

Claim Rejections - 35 USC § 102

2.0 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.0 **Claims 1, 3, 5, & 10** are rejected under 35 U.S.C. 102(e) as being anticipated by Johnstone (U.S. Patent No.: 6,512,821).

Referring to **Claim 1**, Johnstone teaches: 205 per Fig 2 processes traffic in an access network (method).

205 per Fig 2 receives a plurality of ingress streams of IP traffic from either dial IP modems (125 per Fig 1) or IP router (box between 120 and 130 per Fig 1) or subscribers (105 per Figs 1 & 2) (CPE). The IP packets inherently have a destination address. The ingress traffic is aggregated into combined traffic steams by 205 per Fig 2 without regard to destination address and the aggregated traffic is transmitted to 110 per Fig 1 which is an ISP or backbone network for routing.

In Addition Johnstone teaches:

Regarding **Claim 3**, 205 per Fig 2 receives ingress traffic from dial IP modems (125 per Fig 1) or IP router (box between 120 and 130 per Fig 1) or subscribers (CPE) and then the traffic streams are combined and sent to the ISP (backbone network)

Regarding **Claim 5**, 205 per Fig 2 has an input port for receiving the ingress traffic before aggregation of the traffic is performed.

Regarding **Claim 10**, 205 per Fig 2 receives egress IP traffic from the ISP (backbone) which inherently has an IP address. 110 per Fig 1 or col. 2 line 54-col. 3 line 67 determines which IP router or dial IP modem or subscribers (CPE port) to route the packet to based upon destination address and routes the traffic to the respective port. The IP packets are transmitted from the modem ports to the host that are connected

4.0 Claims 6, 7, 12-14, 20, 22-23, 30, 33, & 37 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Johnstone (U.S. Patent No.: 6,512,821) in view of Nogami (U.S. Patent No.:

6,781,994)

Referring to **claim 6**, Johnstone teaches the method of claim 1 and subscriber receives the ingress traffic streams at a plurality of subscribers (CPE) and 205 per Fig 2 aggregates the IP packets into the combined traffic stream.

Johnston does not expressly call for: segmenting at the CPE ports the IP packets in the ingress traffic steams into asynchronous transport mode (ATM) adaption layer (AAL) cells, wherein the AAL cells include a virtual private interface/virtual connection interface (VPI/VCI) ATM address generated from the IP address of the IP packets; switching the AAL cells to a network interface port; reassembling the IP packets from the AAL cells at the network interface port but teaches ATM per col. 4 line 26 or col. 4 line 48.

Nogami teaches: segmenting at the CPE ports the IP packets in the ingress traffic steams into asynchronous transport mode (ATM) adaption layer (AAL) cells per Figs 12 & 13 and col. 7 line 43-col. 9 line 60), wherein the AAL cells include a virtual private interface/virtual connection interface (VPI/VCI) ATM address generated from the IP address of the IP packets per Figs 12 & 13 and col. 7 line 43-col. 9 line 60); switching the AAL cells to a network interface port; reassembling the IP packets from the AAL cells at the network interface port per Figs 12 & 13 and col. 7 line 43-col. 9 line 60.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the segmentation; translation of IP header to VPI/VCI, and switching of Nogami to the network of Johnston in order to perform high speed routing via cut through routing.

Referring to **Claim 7**, the combination of Johnstone and Nogami teaches the method of claim 6 and reassembling of the IP packets from ATM or AAL cells and Johnston teaches PVC or fixed addresses per col. 4 lines 10

The combination of Johnston and Nogami do not expressly call for: segmenting, buffering, and reassembling.

Nogami teaches segmenting, buffering, and reassembling which is inherent in order to translate the IP address to a VPI/VCI per Figs 12 & 13 and col. 7 line 43-col. 9 line 60.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the segmentation and buffer of Nogami to the network of Johnston in order to perform high speed routing via cut through.

Referring to **Claim 12,** Johnstone teaches: the method of claim 10,

Johnston does not expressly call for: determining an asynchronous transport mode (ATM) address for each IP packet of the egress traffic stream based on its IP address; segmenting each IP packet into a set of ATM adoption layer (AAL) cells having the ATM address for the IP packet; switching the AAL cells to their respective CPE ports based on the ATM address; reassembling the IP packets from the AAL cells at each CPE port for delivery but teaches ATM per col. 4 line 26 or col. 4 line 48.

Nogami teaches: determining an asynchronous transport mode (ATM) address for each IP packet of the egress traffic stream based on its IP address per Figs 12 & 13 and col. 7 line 43-col. 9 line 60; segmenting each IP packet into a set of ATM adoption layer (AAL) cells having the ATM address for the IP packet per Figs 12 & 13 and col. 7 line 43-col. 9 line 60 and switching the AAL cells to their respective CPE ports based on the ATM address per Figs 12 & 13 and col. 7 line 43-col. 9 line 60; reassembling the IP packets from the AAL cells at each CPE port for delivery per Figs 12 & 13 and col. 7 line 43-col. 9 line 60)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the segmentation and switching of Nogami to the network of Johnston in order to perform high speed routing via cut through routing.

Regarding **Claim 13,** the combination of Johnstone and Nogami teaches the method of claim 12 The combination of Johnston and Nogami do not expressly call for: buffering but teaches reassembly

Nogami teaches: SAR per Figs 12 & 13 and col. 7 line 43-col. 9 line 60.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the SAR or reassembly of Nogami to the network of Johnston in order to perform high speed routing via cut through.

Regarding **claim 14,** the combination of of Johnstone and Nogami teaches the method of claim 14. The combination of Johnston and Nogami do not expressly call for: VPI/VCI address

Nogami teaches : VPI/VCI address per Figs 12 & 13 and col. 7 line 43-col. 9 line 60.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the PVI/VCI address of Nogami to the network of Johnston and Nogami in to route ATM cells.

Referring to **Claim 20**, Johnstone teaches: Fig 2 routes traffic in an access network

205 per Fig 2 receives a plurality of ingress streams of IP traffic from either dial IP modems (125 per Fig 1) or IP router (box between 120 and 130 per Fig 1) (CPE). Each IP packet inherently has an address. 205 per Fig 2 receives egress IP packets from 110 per Fig 2 or backbone network for delivery to the subscribers or CPE

Johnstone does not expressly call for: segmenting the ingress IP packets at a CPE interface of the access network into the asynchronous transport mode (ATM) adoption layer (AAL) cells, wherein the AAL cells include a virtual private interface/virtual connection interface (VPI/VCI) address generated from the IP addresses of the IP packets; segmenting the egress IP packets at a network interface into AAL cells; and switching the AAL cells across the access network but teaches ATM

Nogami teaches: segmenting the ingress IP packets at a CPE interface of the access network into the asynchronous transport mode (ATM) adoption layer (AAL) cells, wherein the AAL cells include a virtual private interface/virtual connection interface (VPI/VCI) address generated from te;h IP addresses of the IP packets; segmenting the egress IP packets at a network interface into AAL cells; and switching the AAL cells across the access network per Figs 12 & 13 and col. 7 line 43-col. 9 line 60

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the switching; segmenting; and reassembling or Nogami to the network of Johnston in order to perform high speed routing via cut through routing.

Referring to **claim 22**, the combination of Johnstone & Nogami taught the method of claim 20, the combination did not expressly call for: comprising reassembling the AAL cells into IP packets at a periphery of the access network but taught segmentation of IP packets into AAL. It would have been obvious to one of ordinary skill in the art at the time of the invention to reassemble the AAL cells into IP packets at the periphery in order to send IP packets over the ATM backbone per Fig 1.

Referring to **claim 23**, the combination of Johnstone & Nogami taught the method of claim 20, the combination did not expressly call for: comprising delineating the IP packets

Nogami teaches adding an ATM header to each IP packet which delineates the IP packets per Figs 12 & 13 and col. 7 line 43-col. 9 line 60

It would have been obvious to add the ATM header of Nogami to the combination Johnstone and Nogami in order to be standards compliant.

Referring to **claim 33**, the combination of Johnstone and Nogami teaches the method of claim 26 and reassembling of the IP packets from ATM or AAL cells and Johnston teaches PVC or fixed addresses per col. 4 lines 10

The combination of Johnston and Nogami do not expressly call for: segmenting & buffering, Nogami teaches segmenting and buffering which is inherent in order to translate the IP address to a VPI/VCI per Figs 12 & 13 and col. 7 line 43-col. 9 line 60.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the segmentation and buffer of Nogami to the network of Johnston in order to perform high speed routing via cut through.

Referring to **claim 37**, Johnstone teaches: 205 per Fig 2 (system) which processes traffic in an access network.

205 per Fig 2 receives a plurality of ingress streams of IP traffic from either dial IP modems (125 per Fig 1) or IP router (box between 120 and 130 per Fig 1) or subscribers (105 per Figs 1 & 2) (CPE). The IP packets inherently have a destination address. The ingress traffic is aggregated into combined traffic steams by 205 per Fig 2 without regard to destination address and the aggregated traffic is sent to 110 per Fig 1 which is an ISP or backbone network for routing.

205 per Fig 2 receives egress traffic stream from the ISP or backbone network, The egress traffic stream includes a plurality of IP packets with an IP address. 205 per Fig 2 determines a subscriber or (CPE) where IP inherently has a port and 205 transmits the packet to appropriate destination subscribe traffic streams to a plurality of subscribers or CPE) .

Johnston does not expressly call for: logic on a computer readable medium or determining the asynchronous transport mode (ATM) address for each packet based on its IP address, segment each IP packet into a set of ATM adaption layer (AAL) cells having the ATM address for the aip packet, switch the AAL cells to their respective CPE ports based on the ATM address and reassemble the IP packets from the AAL cells at each CPE port for delivery base on their IP address but teaches ATM per per col. 4 line 26 or col. 4 line 48

Nogami teaches: determining the asynchronous transport mode (ATM) address for each packet based on its IP address per Figs 12 & 13 and col. 7 line 43-col. 9 line 60, segment each IP packet into a set of ATM adaption layer (AAL) cells having the ATM address for the IP packet per Figs 12 & 13 and col. 7 line 43-col. 9 line 60, switch the AAL cells to their respective CPE ports based on the ATM address per Figs 12 & 13 and col. 7 line 43-col. 9 line 60 and reassemble the IP packets from the AAL cells at each CPE port for delivery base on their IP address per Figs 12 & 13 and col. 7 line 43-col. 9 line 60

It would have been obvious to one of ordinary skill in the art at the time of the invention to add determining, the segmenting; switching , and reassembling of Nogami to the network of Johnston in order to perform high speed routing via cut through routing.

The combination of Johnstone and Nogami do not expressly call for: implementing the method in logic and storing the logic on a computer readable medium. It is within the level of one skilled in the art at the time of the invention to implement the method of the combination of Johnstone and Nogami in logic. It would have been obvious to one of ordinary skill in the art at the time of the invention to store the logic on a computer readable medium in order to be executable on a processor.

5.0 **Claims 4 & 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnstone

(U.S. Patent No.: 6,512,821) in view of Nogami (U.S. Patent No.: 6,781,994)

further in view of Isoyama (U.S. Patent No: 6,418,145)

Referring to **claim 4**, the Johnstone teaches the method of claim 1, aggregating by 205 per Fig 2 before being sent to the ISP.

Johnstone does not expressly call for: validating an IP packet

Isoyama teaches: determining if a IP header is defective or validating an IP packet per col. 3 lines 30-41

It would have been obvious to add the validating an IP packet of Isoyama to the method of Johnstone in order to determine if the packet is defective before transferring the packet in order to reduce the processing load

Referring to **Claim 29**, it is within the level of one skilled in the art at the time of the invention to implement the method of claim 4, in software or logic. It would have been obvious to one of ordinary skill in the art at the time of the invention to store the software on a computer processable medium so that the logic can be executed on a processor.

6.0 **Claims 11 & 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Johnstone (U.S. Patent No.: 6,512,821 B1) in view of Kaycee (U.S. Patent No.: 6,085,245)

Referring to **claim 11**, Johnstone teaches the method of claim 10.
Johstone does not expressly call for: determining the CPE ports for the IP packet using a static routing table but teaches PVCs per col. 4 lines 1-14

Kaycee teaches a static routing table per col. 1 line 30-col. 2 line 4.

It would have been obvious to add the static routing table of Kaycee to routing the PVCs in the network of Johnstone because PVC utilize fixed or static routing.

Referring to **Claim 16**, Johnstone teaches: a system (Fig 1) for processing access traffic

110 per Fig 1 or col. 2 line 54-col. 3 line 67 receives a plurality of ingress streams of IP traffic from either dial IP modems (125 per Fig 1) or IP router (box between 120 and 130 per Fig 1) (CPE) and aggregates or combines the traffic and sends to a ISP (backbone) (Means for aggregating)

110 per Fig 1 or col. 2 line 54-col. 3 line 67 receives egress traffic from the ISP (backbone). The IP packets inherently have an IP destination address (means for routing)

Johnstone does not expressly call for: static routing or utilizing the IP address to index the static routing table but teaches PVC to the ISP per Fig 1.

Kaycee teaches: static routes col. 1 line 30-col. 2 line 4) and static routing tables inherently utilize the IP address to index the static routing table.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the static routing table of Kaycee to route the IP packets in the PVCs of Johnstone because static routing is faster than dynamic routing because the route tables do not have to converge.

7.0 **Claims 18 & 36** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Johnstone (U.S. Patent No.: 6,512,821 B1) in view of Kaycee (U.S. Patent No.: 6,085,245)

further in view of Nogami (U.S. Patent No.: 6,781,994)

Referring to **claim 18**, the combination of Johnstone and Kaycee teaches: the system of claim 16,

The combination of Johnstone and Kaycee does not expressly call for: means for segmenting incoming IP packets into asynchronous transmport (ATM) adaption layer (AAL) cells, wherei the AAL cell include a virtual private interface\/virtual connection interface (VPI/VCI) address generated from the; IP address of the IP packets; means for switching the AAL cells within the access network; and means for reassembling the AAL cells into outgoing IP packets

Nogami teaches: means for segmenting incoming IP packets into asynchronous transmport (ATM) adaption layer (AAL) cells, wherei the AAL cell include a virtual privat interface\/virtual connection interface (VPI/VCI) address generated from the; IP address of the IP packets; means for wswitching the AAL cells within the access network; and means for reassembling the AAL cells into outgoing IP packets per Figs 12 & 13 and col. 7 line 43-col. 9 line 60

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the segmentation, switching, and reassembly of Nogami to the network of Johnston in order to perform high speed routing via cut through routing.

Referring to **claim 36**, the combination or Johnstone and Nogami teaches the logic of claim 35. The combination of Johstone and Nogami do not expressly call for: determining the CPE ports for the IP packet using a static routing table but teaches PVCs per col. 4 lines 1-14

Kaycee teaches a static routing table per col. 1 line 30-col. 2 line 4.

It would have been obvious to add the static routing table of Kaycee to routing the PVCs in the network of the combination of Johnstone and Nogami because PVC utilize fixed or static routing. It is within the level of one skilled in the art at the time of the invention to implement the method of claim 11, in software or logic. It would have been obvious to one of ordinary skill in the art at the time of the invention to store the software on a computer processable medium so that the logic can be executed on a processor.

8.0 **Claims 9, 15, 21, 32, 38, and 40** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Johnstone (U.S. Patent No.: 6,512,821) in view of Nogami (U.S. Patent No.:

6,781,994) further in view of Milles (U.S. Patent No.: U.S. Patent No.; 6,463,476)

Referring to **claim 9** , the combination of Johnstone & Nogami taught the method of claim 1, the combination did not expressly call for: converting IP to ATM via AAL5. Milles teaches: conversion of IP to ATM via AAL5. It would have been obvious to utilize AAL 5 of Milles to the perform the conversion of IP to ATM of the combination of Johnstone and Nogami in order to be standards compliant.

Referring to **claim 15**, the combination of Johnstone & Nogami taught the method of claim 12, the combination did not expressly call for: converting IP to ATM via AAL5. Milles teaches: conversion of IP to ATM via AAL5. It would have been obvious to utilize AAL 5 of Milles to the perform the conversion of IP to ATM of the combination of Johnstone and Nogami in order to be standards compliant.

Referring to **claim 21**, the combination of Johnstone & Nogami taught the method of claim 20, the combination did not expressly call for: converting IP to ATM via AAL5. Milles teaches: conversion of IP to ATM via AAL5. It would have been obvious to utilize AAL 5 of Milles to the perform the conversion of IP to ATM of the combination of Johnstone and Nogami in order to be standards compliant.

Referring to **claim 32**, the combination of Johnstone & Nogami taught the system of claim 26, the combination did not expressly call for: converting IP to ATM via AAL5. Milles teaches: conversion of IP to ATM via AAL5. It would have been obvious to utilize AAL 5 of Milles to

the perform the conversion of IP to ATM of the combination of Johnstone and Nogami in order to be standards compliant

Referring to **claim 38**, the combination of Johnstone & Nogami taught the system of claim 37, the combination did not expressly call for: converting IP to ATM via AAL5. Milles teaches: conversion of IP to ATM via AAL5. It would have been obvious to utilize AAL 5 of Milles to the perform the conversion of IP to ATM of the combination of Johnstone and Nogami in order to be standards compliant

Referring to **claim 40**, the combination of Johnstone & Nogami taught the method of claim 37, the combination did not expressly call for: converting IP to ATM via AAL5. Milles teaches: conversion of IP to ATM via AAL5. It would have been obvious to utilize AAL 5 of Milles to the perform the conversion of IP to ATM of the combination of Johnstone and Nogami in order to be standards compliant.

9.0 **Claims 19** is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnstone (U.S. Patent No.: 6,512,821 B1) in view of Nogami (TBD) in Kaycee (U.S. Patent No.: 6,085,245) further in view of Milles (U.S. Patent No.: U.S. Patent No.; 6,463,476)

Referring to **Claim 19**, the combination of Johnstone, Nogami, Kaycee taught the system of claim 18, the combination did not expressly call for: converting IP to ATM via AAL5. Milles teaches: conversion of IP to ATM via AAL5. It would have been obvious to utilize AAL 5 of Milles to the perform the conversion of IP to ATM of the combination in order to be standards compliant.

10.0 **Claims 24-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnstone (U.S. Patent No.: 6,512,821) in view of Nogami (U.S. Patent No.: 6,781,994) in view of Isoyama (U.S. Patent No: 6,418,145)

Referring to claim 24, the combination of Johnstone & Nogami taught the method of claim 22, the combination did not expressly call for: validating an IP packet

Isoyama teaches: determining if a IP header is defective or validating an IP packet per col. 3 lines 30-41

It would have been obvious to add the validating an IP packet of Isoyama to the the method of the combination of Johnstone & Nogami in order to determine if the packet is defective before transferring the packet in order to reduce the processing load

Referring to Claim 25, the combination of Johstone & Nogami taught the method of claim 22, the combination did not expressly call for: dropping defective IP packets

Isoyama teaches: dropping defective IP packets per col. 3 lines 30-41.

It would have been obvious to add the dropping of defection packets of Isoyama to the method of the combination of Johnstone & Nogami in order to reduce the processing load.

11.0 **Claims 26-28, 30, & 35** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Johnstone (U.S. Patent No.: 6,512,821)

Referring to **claim 26**, it is within the level of one skilled in the art at the time of the invention to implement the method of claim 1, in software or logic. It would have been obvious to one of ordinary skill in the art at the time of the invention to store the software on a computer processable medium so that the logic can be executed on a processor.

Referring to **claim 27**, it is within the level of one skilled in the art at the time of the invention to implement the method of claim 3 which describes the details of receiving ingress streams, in software or logic. It would have been obvious to one of ordinary skill in the art at the time of the invention to store the software on a computer processable medium so that the logic can be executed on a processor

Referring to **claim 28**, it is within the level of one skilled in the art at the time of the invention to implement the method of claim 3 which describes the details of transmitting combined traffic to inherent ISP (backbone router), in software or logic. It would have been obvious to one of ordinary skill in the art at the time of the invention to store the software on a computer processable medium so that the logic can be executed on a processor

Referring to **claim 30**, Johnstone teaches the system of Claim 26, and 205 per Fig 2 routes IP packets from the ingress traffic streams to a inherent network port of an access device ingress streams of IP traffic from either dial IP modems (125 per Fig 1) or IP router (box between 120 and 130 per Fig 1) (CPE). The IP packets inherently have a destination address. (receiving a plurality of ingress traffic streams). It is within the level of one skilled in the art at the time of the invention to implement the limitations of claim 30 in software or logic. It would have been obvious to one of ordinary skill in the art at the time of the invention to store the software on a computer processable medium so that the logic can be executed on a processor.

Referring to **claim 35**, it is within the level of one skilled in the art at the time of the invention to implement the method of claim 10, in software or logic. It would have been obvious to one of ordinary skill in the art at the time of the invention to store the software on a computer processable medium so that the logic can be executed on a processor

Claim Rejections - 35 USC § 112

12.0 The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1,3-7, 9-15, 18-19, 20-25, 26-33, 35-38, & 40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to Claims 1 & 26, What is meant by "destination address" and "destination addresses". Are "destination address" and "destination addresses" the same?

Referring to Claims 6, 18, 20, & 31; What is meant by "interface/virtual" and "VPI/VCI". Does the slash mean "and" or does the slash mean "or"?

Referring to claim 18, what is meant by "incoming packets"? Are they ingress or egress packets?

Claim Objections

13.0 Claims 6-7 & 30 are objected to because of the following informalities:

Referring to Claim 6, the examiner objects to the wording of claim 6 because the independent claim 1 limitation is that the ingress traffic is combined traffic stream without regard to the destination address and claim 6 defines how the traffic is routed based upon destination address. The two concepts are inconsistent. How can the traffic not be routed based upon destination address and then be routed based upon destination address? The examiner suggests that the applicant clarify the claim language.

Referring to Claim 30, The examiner objects to the wording of "streams to a network interface ports". It seems that the applicant is trying to say "streams from a network interface port". Please clarify. Appropriate correction is required.

Response to Arguments

14.0 Applicant's arguments with respect to claims 1, 3-7, 9-16, 18-33, 35-38, & 40 have been considered but are moot in Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Please refer to the above rejection for details.

Conclusion

15.0 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W Wilson whose telephone number is 571/272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 571/272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert W. Wilson

Robert W Wilson
Examiner
Art Unit 2661

RWW
6/14/05

PHIRIN SAM
PRIMARY EXAMINER